

IN THE CLAIMS:

The following is a complete listing of the claims, and replaces all earlier listings and all earlier versions.

1. (previously presented) A recording apparatus for attaching, to a set of binary data, meta-data as information identifying the set of binary data, the apparatus comprising:

meta-data accessing means for accessing meta-data to be used to identify a group of plural sets of binary data;

binary data accessing means for accessing plural sets of binary data; and

meta-data attaching means for obtaining meta-data identifying a group of plural sets of binary data by using said meta-data accessing means, and then repeatedly attaching the same meta-data accessed by said meta-data accessing means to the group of plural sets of binary data accessed by said binary data accessing means to create the group of plural sets of binary data, every set having the same meta-data, when the recording apparatus accesses plural sets of binary data by said binary data accessing means.

2. (previously presented) The recording apparatus according to claim 1, characterized by further comprising storage means for storing the binary data having meta-data output by said meta-data attaching means.

3. (previously presented) The recording apparatus according to claim 1, characterized by further comprising binary data having meta-data write means for writing

the binary data having meta-data output by said meta-data attaching means in a detachable storage medium or external device.

4. (original) The recording apparatus according to claim 2, characterized by further comprising binary data having meta-data write means for writing the binary data having meta-data stored in said storage means in a detachable storage medium or external device.

5. (original) The recording apparatus according to claim 1, characterized in that

said apparatus further comprises meta-data loading means for loading meta-data stored in advance in a detachable storage medium or external device, and
said meta-data attaching means attaches the meta-data loaded by said meta-data loading means to the binary data to generate the binary data having meta-data.

6. (original) The recording apparatus according to claim 1, characterized in that

said apparatus further comprises binary data loading means for loading binary data stored in a first detachable storage medium or external device, and
said meta-data attaching means attaches the meta-data to the binary data loaded by said binary data loading means , to generate the binary data having meta-data.

7. (previously presented) The recording apparatus according to claim 6, characterized by further comprising binary-data having meta-data write means for writing the binary data having meta-data output by said meta-data attaching means in the first storage medium as a loading source of the binary data.

8. (original) The recording apparatus according to claim 6, characterized by further comprising binary-data having meta-data write means for writing the binary data having meta-data stored in said storage means in the first storage medium as a loading source of the binary data.

9. (original) The recording apparatus according to claim 1, characterized in that said meta-data attaching means embeds the meta-data to a predetermined position of the binary data.

10. (original) The recording apparatus according to claim 1, characterized in that said meta-data attaching means attaches only information representing a file name of the meta-data or a location of the meta-data to a predetermined position of the binary data.

11. (currently amended) A recording method of attaching, to a set of binary data, meta-data as information identifying the set of binary data, the method comprising:

a meta-data accessing step of accessing meta-data ~~identifying~~ to be used to identify a group of plural sets of binary data;

a binary data accessing step of accessing plural sets of binary data; and
a meta-data attaching step of obtaining meta-data identifying a group of plural sets of binary data by ~~[[using]]~~ causing execution of said meta-data accessing ~~[[means]]~~ step, and then repeatedly attaching the same meta-data accessed ~~[[by]]~~ in said meta-data accessing step to the group of plural sets of binary data accessed in the binary data accessing step to create the group of plural sets of binary data, every set having the same meta-data, when ~~the recording apparatus accesses~~ plural sets of binary data are accessed in said binary data accessing step.

12. (previously presented) The recording method according to claim 11, characterized by further comprising the storage step of storing the binary data having meta-data output by the meta-data attaching step.

13. (previously presented) The recording method according to claim 12, characterized by further comprising the binary data having a meta-data write step of writing the binary data having meta-data output by the meta-data attaching step in a detachable storage medium or external device.

14. (original) The recording method according to claim 12, characterized by further comprising the binary data having meta-data write step of writing the binary data having meta-data stored in the storage step in a detachable storage medium or external device.

15. (original) The recording method according to claim 11, characterized in that said recording method further comprises the meta-data loading step of loading meta-data stored in advance in a detachable storage medium or external device, and the meta-data attaching step comprises attaching the meta-data loaded in the meta-data loading step to the binary data to generate the binary data having meta-data.

16. (original) The recording method according to claim 11, further characterized in that the recording method further comprises binary data loading step of loading the binary data stored in a first detachable storage medium or external device, and the meta-data attaching step comprises attaching the meta-data to the binary data loaded in the binary data loading step to generate the binary data having meta-data.

17. (previously presented) The recording method according to claim 16, characterized by further comprising the binary-data having meta-data write step of writing the binary data having meta-data output by the meta-data attaching step in the first detachable storage medium as a loading source of the binary data.

18. (original) The recording method according to claim 16, characterized by further comprising the binary-data having meta-data write step of writing the binary data having meta-data stored in the storage step in the first detachable storage medium as a loading source of the binary data.

19. (original) The recording method according to claim 11, characterized in that the meta-data attaching step comprises embedding the meta-data to a predetermined position of the binary data.

20. (original) The recording method according to claim 11, characterized in that the meta-data attaching step comprises attaching only information representing a file name of the meta-data or a location of the meta-data to a predetermined position of the binary data.

21. (currently amended) A storage medium which stores a processing program for attaching, to a set of binary data, meta-data as information identifying the set of binary data, the processing program comprising:

a meta-data accessing step of accessing meta-data to be used to identify a group of plural sets of binary data;

a binary data accessing step of accessing plural sets of binary data to which the generated meta-data is to be attached; and

a meta-data attaching step of obtaining meta-data identifying a group of plural sets of binary data by ~~[[using]]~~ causing execution of said meta-data accessing ~~[[means]]~~ step, and then repeatedly attaching the same meta-data accessed ~~[[by]]~~ in said meta-data ~~generation~~ accessing step to the group of plural sets of binary data accessed in the binary data accessing step to create the group of plural sets of binary data, every set having the same meta-data, when ~~the recording apparatus accesses~~ plural sets of binary data are accessed in said binary data accessing step.

22. (currently amended) A recording apparatus for attaching, to a set of binary data, meta-data as information identifying the set of binary data, the apparatus comprising:

meta-data accessing means for accessing meta-data to be used to identify a group of plural sets of binary data;

binary data loading means for loading plural sets of binary data to which the generated meta-data is to be attached from a first detachable storage medium or external device; and

meta-data attaching means for obtaining meta-data identifying a group of plural sets of binary data by using said meta-data accessing means, and then repeatedly attaching the same meta-data accessed by said meta-data accessing means to the group of plural sets of binary data loaded by said binary data loading means to create the group of plural sets of binary data, every set having the same meta-data, when the recording apparatus ~~accesses~~ loads plural sets of binary data by said binary data ~~accessing~~ loading means.

23. (original) The recording apparatus according to claim 22, characterized by further comprising storage means for storing the binary data having meta-data outputted by said meta-data attaching means.

24. (original) The recording apparatus according to claim 22, characterized by further comprising binary data having meta-data write means for writing the binary data having meta-data output from said meta-data attaching means in the first detachable storage medium or external device as a loading source of the binary data.

25. (original) The recording apparatus according to claim 22, characterized by further comprising binary data having meta-data write means for writing the binary data having meta-data output from said meta-data attaching means in a second detachable storage medium or external device different from a loading source of the binary data.

26. (original) The recording apparatus according to claim 23, characterized by further comprising binary data having meta-data write means for writing the binary data having meta-data stored in said storage means in the first storage medium as a loading source of the binary data.

27. (original) The recording apparatus according to claim 23, characterized by further comprising binary data having meta-data write means for writing the binary data having meta-data stored in said storage means in a second detachable storage medium or external device different from a loading source of the binary data.

28. (original) The recording apparatus according to claim 22, further characterized in that

said recording apparatus further comprises loading means for-loading meta-data stored, in advance, in a detachable storage medium or external device, and

said meta-data attaching means attaches the meta-data loaded by said meta-data loading means to the binary data.

29. (original) The recording apparatus according to claim 22, characterized in that said meta-data attaching means embeds the meta-data to a predetermined position of the binary data.

30. (original) The recording apparatus according to claim 22, characterized in that said meta-data attaching means attaches only information representing a file name of the meta-data or a location of the meta-data to a predetermined position of the binary data.

31. (currently amended) A recording method of attaching, to a set of binary data, meta-data as information identifying the set of binary data, the method comprising:

a meta-data accessing step of accessing meta-data identifying a group of plural sets of binary data;

a binary data loading step of loading plural sets of binary data to which the generated meta-data is to be attached from a first detachable storage medium or external device; and

a meta-data attaching step of obtaining meta-data identifying a group of plural sets of binary data by ~~[[using]]~~ causing execution of said meta-data accessing ~~[[means]]~~ step, and then repeatedly attaching the same meta-data accessed in said meta-data accessing step to the group of plural sets of binary data loaded in the binary data loading step to create the group of plural sets of binary data, every set having the same meta-data, when ~~the recording apparatus accesses~~ plural sets of binary data ~~[[by]]~~ are loaded in said binary data ~~accessing means~~ loading step.

32. (original) The recording method according to claim 31, characterized by further comprising a storage step of storing the binary data having meta-data output in the meta-data attaching step.

33. (previously presented) The recording method according to claim 31, characterized by further comprising a binary-data having meta-data write step of writing a binary data having meta-data output by the meta-data attaching step in the first storage medium as a loading source of the binary data.

34. (previously presented) The recording method according to claim 31, characterized by further comprising the binary-data having meta-data write step of writing the binary data having meta-data output by the meta-data attaching step in a second detachable storage medium or external device different from a loading source of the binary data.

35. (original) The recording method according to claim 32, characterized by further comprising the binary data having meta-data write step of writing the binary data having meta-data stored in the storage step in the first detachable storage medium as a loading source of the binary data.

36. (original) The recording method according to claim 32, characterized by further comprising binary data having meta-data write step of writing the binary data having meta-data stored in the storage step in a second detachable storage medium or external device different from a loading source of the binary data.

37. (original) The recording method according to claim 31, characterized in that

the recording method further comprises a loading step of loading meta-data stored, in advance, in a detachable storage medium or external device, and

the meta-data attaching step comprises attaching the meta-data loaded in the meta-data loading step to the binary data.

38. (original) The recording method according to claim 31, characterized in that the meta-data attaching step comprises embedding the meta-data to a predetermined position of the binary data.

39. (original) The recording method according to claim 31, characterized in that the meta-data attaching step comprises attaching only information representing a file name of the meta-data or a location of the meta-data to a predetermined position of the binary data.

40. (currently amended) A storage medium which stores a processing program for attaching, to a set of binary data, meta-data as information identifying the set of binary data, the processing program comprising:

a meta-data accessing step of accessing meta-data to be used to identify a group of plural-sets of binary data;

a binary data loading step of loading plural sets of binary data to which the generated meta-data is to be attached from a first detachable storage medium or external device; and

a meta-data attaching step of obtaining meta data identifying a group of plural sets of binary data by ~~[[using]]~~ causing execution of said meta-data accessing ~~[[means]]~~ step, and then repeatedly attaching the same meta-data accessed ~~[[by]]~~ in said ~~[[the]]~~ meta-data accessing step to the group of plural-sets of binary data loaded in the binary data loading step to create the group of plural-sets of binary data, each set having the same meta-data, when plural-sets of binary data are loaded in said binary data loading step.

41. (currently amended) A recording apparatus for attaching, to a set of binary data, meta-data as information identifying the set of binary data, the apparatus comprising:

meta-data loading means for loading meta-data ~~identifying to be used to~~ identify a group of plural-sets of binary data from a first detachable storage medium or external device;

binary data accessing means for accessing plural-sets of binary data ~~to which the loaded meta-data is to be attached~~; and

meta-data attaching means for obtaining meta-data identifying a group of plural-sets of binary data by using said meta-data ~~accessing~~ loading means, and then repeatedly attaching the same meta-data loaded by said meta-data loading means to the group of plural-sets of binary data accessed by said binary data accessing means to create the group of plural-sets of binary data, every set having the same meta-data, when the recording apparatus accesses plural-sets of binary data by said binary data accessing means.

42. (previously presented) The recording apparatus according to claim 41, characterized by further comprising storage means for storing the binary data having meta-data output by said meta-data attaching means.

43. (original) The recording apparatus according to claim 41, characterized by further comprising binary data having meta-data write means for writing the binary data having meta-data output from said meta-data attaching means in the first storage medium or external device as a loading source of the meta-data.

44. (previously presented) The recording apparatus according to claim 41, characterized by further comprising binary data having meta-data write means for writing the binary data having meta-data output by said meta-data attaching means in a second detachable storage medium or external device different from a loading source of the binary data.

45. (original) The recording apparatus according to claim 41, characterized by further comprising binary-data having meta-data write means for writing the binary data having meta-data stored in said storage means in the first detachable storage medium as a loading source of the meta-data.

46. (original) The recording apparatus according to claim 41, characterized by further comprising binary data having meta-data write means for writing the binary data

having meta-data stored in said storage means in a second detachable storage medium or external device different from a loading source of the meta-data.

47. (original) The recording apparatus according to claim 41, characterized in that said apparatus further comprises binary data loading means for loading binary data stored in advance in a detachable storage medium or external device, and

said meta-data attaching means attaches the meta-data loaded by said meta-data loading means to the binary data to generate the binary data having meta-data.

48. (original) The recording apparatus according to claim 41, characterized in that said meta-data attaching means embeds the meta-data to a predetermined position of the binary data.

49. (previously presented) The recording apparatus according to claim 41, characterized in that said meta-data attaching means attaches only information representing a file name of the meta-data or a location of the meta-data to a predetermined position of the plural sets of binary data.

50. (currently amended) A recording method of attaching, to a set of binary data, meta-data as information identifying the set of binary data, the method comprising:

a meta-data ~~accessing~~ loading step of ~~accessing~~ loading meta-data to be used to identify a group of plural sets of binary data from a first detachable storage medium or external device;

a binary data accessing step of accessing plural sets of binary data, ~~from the first detachable storage medium or external device~~; and

a meta-data attaching step of obtaining meta-data identifying a group of plural sets of binary data by ~~[[using]]~~ causing execution of said meta-data ~~accessing means~~ loading step, and then repeatedly attaching the same meta-data ~~accessed~~ loaded in the meta-data ~~accessing~~ loading step to the group of plural sets of binary data accessed in the binary data accessing step to create the group of plural sets of binary data, every set having the same meta-data, when ~~the recording apparatus accesses~~ plural sets of binary data are accessed ~~[[by]]~~ in said binary data accessing ~~[[means]]~~ step.

51. (previously presented) The recording method according to claim 50, characterized by further comprising the storage step of storing the binary data having meta-data output by the meta-data attaching step.

52. (previously presented) The recording method according to claim 50, characterized by further comprising the binary data having meta-data write step of writing the binary data having meta-data output by the meta-data attaching step in the first storage medium or external device as a loading source of the binary data.

53. (previously presented) The recording method according to claim 50, characterized by further comprising the binary data having meta-data write step of writing the binary data having meta-data output by the meta-data attaching step in a second

detachable storage medium or external device different from a loading source of the binary data.

54. (original) The recording method according to claim 50, characterized by further comprising the binary data having meta-data write step of writing the binary data having meta-data stored in the storage step in the first storage medium as a loading source of the binary data.

55. (original) The recording method according to claim 50, characterized by further comprising the binary data having meta-data write step of writing the binary data having meta-data stored in the storage step in a second detachable storage medium or external device different from a loading source of the binary data.

56. (original) The recording method according to claim 50, characterized in that

said method further comprises the binary data loading step of loading binary data stored, in advance, in a detachable storage medium or external device, and

the meta-data attaching step comprises attaching the meta-data loaded in the meta-data loading step to the binary data to generate the binary data having meta-data.

57. (original) The recording method according to claim 50, characterized in that the meta-data attaching step comprises embedding the meta-data to a predetermined position of the binary data.

58. (original) The recording method according to claim 50, characterized in that the meta-data attaching step comprises attaching only information representing a file name of the meta-data or a location of the meta-data to a predetermined position of the binary data.

59. (currently amended) A storage medium which stores a processing program for attaching, to a set of binary data, meta-data as information identifying the set of binary data, the processing program comprising:

a meta-data ~~accessing~~ loading step of ~~accessing~~ loading meta-data to be used to identify a group of plural sets of binary data from a first detachable storage medium or external device;

a binary data accessing step of accessing plural sets of binary data, ~~from the first detachable storage medium or external device; and~~

a meta-data attaching step of obtaining meta-data identifying a group of plural sets of binary data by ~~[[using]]~~ causing execution of said meta-data ~~accessing means~~ loading step, and then repeatedly attaching the same meta-data ~~accessed~~ loaded in the meta-data ~~accessing~~ loading step to the group of plural sets of binary data accessed in the binary data accessing step to create the group of plural sets of binary data, every set having the same meta-data, when the recording apparatus accesses plural sets of binary data are accessed in ~~[[by]]~~ said binary data accessing ~~[[means]]~~ step.

60. (previously presented) The recording apparatus according to Claim 1, wherein said meta-data attaching means is driven after an insertion of a memory card

storing binary data, a connection of interface cable for accessing binary data, or a start of communication for accessing binary data.

61. (previously presented) The recording method according to Claim 11, wherein in said meta-data attaching step said meta-data attaching means is driven after an insertion of a memory card storing binary data, a connection of interface cable for accessing binary data, or a start of communication for accessing binary data.

62. (previously presented) The storage medium processing program according to Claim 21, wherein in said meta-data attaching step, said meta-data attaching means is driven after an insertion of a memory card storing binary data, a connection of interface cable for accessing binary data, or a start of communication for accessing binary data.

63. (previously presented) The recording apparatus according to Claim 22, wherein said meta-data attaching means is driven after an insertion of a memory card storing binary data, a connection of interface cable for accessing binary data, or a start of communication for accessing binary data.

64. (previously presented) The recording method according to Claim 31, wherein in said meta-data attaching step, said meta-data attaching means is driven after an insertion of a memory card storing binary data, a connection of interface cable for accessing binary data, or a start of communication for accessing binary data.

65. (previously presented) The storage medium processing program according to Claim 40, wherein in said meta-data attaching step, said meta-data attaching means is driven after an insertion of a memory card storing binary data, a connection of interface cable for accessing binary data, or a start of communication for accessing binary data.

66. (previously presented) The recording apparatus according to Claim 41, wherein said meta-data attaching means is driven after an insertion of a memory card storing binary data, a connection of interface cable for accessing binary data, or a start of communication for accessing binary data.

67. (previously presented) The recording method according to Claim 50, wherein in said meta-data attaching step, said meta-data attaching means is driven after an insertion of a memory card storing binary data, a connection of interface cable for accessing binary data, or a start of communication for accessing binary data.

68. (previously presented) The storage medium processing program according to Claim 59, wherein in said meta-data attaching step, said meta-data attaching means is driven after an insertion of a memory card storing binary data, a connection of interface cable for accessing binary data, or a start of communication for accessing binary data.